

IN THE CLAIMS:

The following listing of claims will replace all prior listings of claims in this application:

1. (Currently Amended): In a multi-processor computing environment, a method executed by a first processor for allocating resources for use by a plurality of other processors to execute multiple tasks in the execution of a single application program, the method comprising:

providing a script to the first processor before beginning execution of the single application, the first processor being dedicated solely to parsing the script and to the allocation of resources to the plurality of other processors, the script containing information related to the resources required by each of the plurality of other processors to execute one or more of the tasks and when the resources are required in the execution sequence of [[an]] the single application for each of the one or more tasks;

parsing the script to determine the resources required by the plurality of other processors for each of the one or more tasks; and

dynamically allocating the resources as needed by the plurality of other processors in the execution of the single application.

2. – 3. (Cancelled)

4. (Previously Presented): The method of claim 1 wherein the resources include at least one of memory and a matrix configuration.

5. (Cancelled)

6. (Previously Presented): The method of claim 1 wherein the information in the script is the amount of buffer memory needed by a program.

7. (Currently Amended): A method by a dedicated processor for allocating resources for executing tasks in an application in a multi-processor computing environment, the method comprising:

providing a script to the dedicated processor prior to beginning execution of the application, the dedicated processor being dedicated solely to executing the script and the allocation of resources to one or more other processors, the script containing a map of execution sequences including an execution sequence of [[the]] one or more tasks for each of the one or more other processors;

parsing the script to determine resources required by each of the one or more other processors based on the map of execution sequences; and

allocating the resources immediately prior to execution of each of the one or more tasks to achieve the most efficient execution of all of the one or more tasks without any prior requests from any of the one or more other processors, whereby resource allocation is synchronized with when the resources are needed for the execution of the one or more tasks.

8. (Original): The method of claim 7 wherein the script is an I/O processor script.

9. (Currently Amended): A predictive resource allocation system for a multi-processor computing environment having a plurality of processors, comprising:

a plurality of other processors for executing an application;

a dedicated processor dedicated solely to providing resource allocation to the plurality of other processors;

a script file containing information related to the resources required by the plurality of processors to execute the application including a map of execution sequences including an execution sequence of one or more tasks for each of the plurality of other processors;

the dedicated processor running the script file and parsing the script to determine the resources required by the plurality of other processors prior to beginning execution of the application; and

the dedicated processor dynamically allocating resources at the time [[they]] the resources are needed by the plurality of other processors for the execution of the application.

10. (Cancelled)

11. (Currently Amended): A method for allocating resources for use by a first processor in execution of an application comprising a plurality of tasks in a multi-processor computing environment, the method comprising:

providing a script to the first processor prior to beginning execution of the application, the first processor being dedicated solely to parsing the script and to allocation of resources to a plurality of other processors, the script containing a map of execution sequences including an execution sequence of [[the]] tasks for each of the plurality of other processors;

parsing the script to determine the execution sequence of the tasks for each of the plurality of other processors to execute the tasks and to determine the resources required by ~~the tasks~~ each of the plurality of other processors to execute the tasks; and

allocating the resources to the plurality of other processors such that resource allocation is synchronized with when the resources are needed by the plurality of other processors for efficient execution of the application without any prior requests from any of the plurality of other processors, whereby resource allocation is synchronized with when the resources are needed for the execution of the tasks.

12. (Currently Amended): The method of claim 11 wherein allocating the resources to the plurality of other processors in the multi-processor environment further comprises dynamically allocating the resources at the time needed for the execution of the tasks.

13. (New): The method of claim 7 wherein each of the plurality of other processors executes multiple tasks as part of a single application.